

# User Manual Permanent magnetic filter, Hygienic series SFH

### **GOUDSMIT Magnetic Systems B.V.**

P.O. Box 18 5580 AA Waalre Petunialaan 19 5582 HA Waalre

The Netherlands

Tel. (+31) (0)40 2213283
Internet www.goudsmitmagnets.com
E-mail info@goudsmitmagnets.com





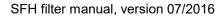
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The information we supply may only be used for service or operation of the product. It may not be disclosed to any third parties without our prior written permission.

Our products and the data in our documentation may be subject to later amendment without any obligation to previously supplied equipment.

Please ensure that anyone working with the device has access to all the necessary documentation.







## Safety



### Dangers of strong magnetic fields

Ferromagnetic objects will be attracted, if you are closer than 30 cm to the magnet. Any ferromagnetic tools or components may be attracted and damage the device.



### Danger to people fitted with implanted medical devices

People fitted with pacemakers should not enter the magnetic field of the device.



### Danger to electronic and mechanical devices

Magnetic information carriers or electronic and mechanical devices, etc, may be destroyed if they enter the magnetic field.



### **Warning Pictograms**

Ensure that all warning pictograms are legible. Replace if lost or damaged.



### **General Protection**

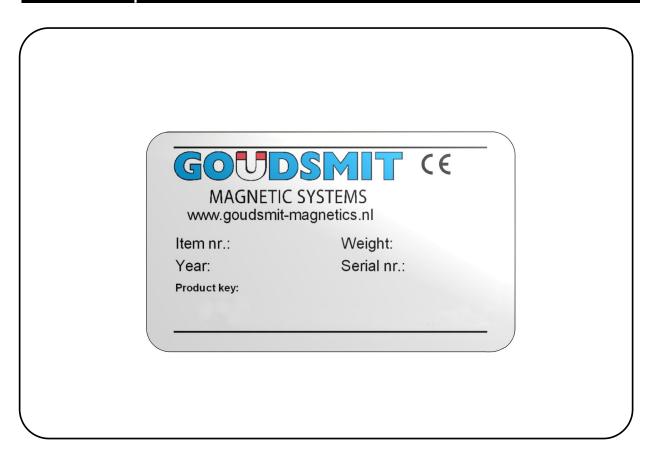
Wear all the personal safety equipment necessary for safe operation or maintenance. This may include; overalls, safety glasses, ear protection, helmet, safety shoes, etc.



Keep all screens and safeguards in place



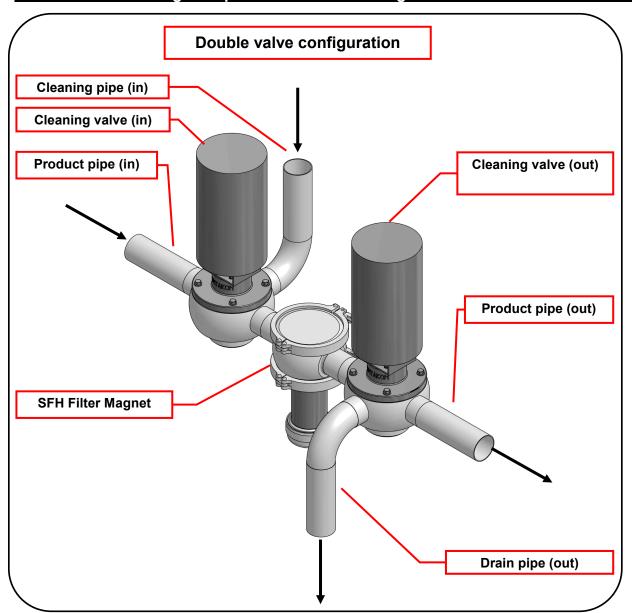
# Identification plate



If you need to correspond about your device, make a note of the numbers on the identification plate. In some cases the plate may be replaced by etched identification numbers.



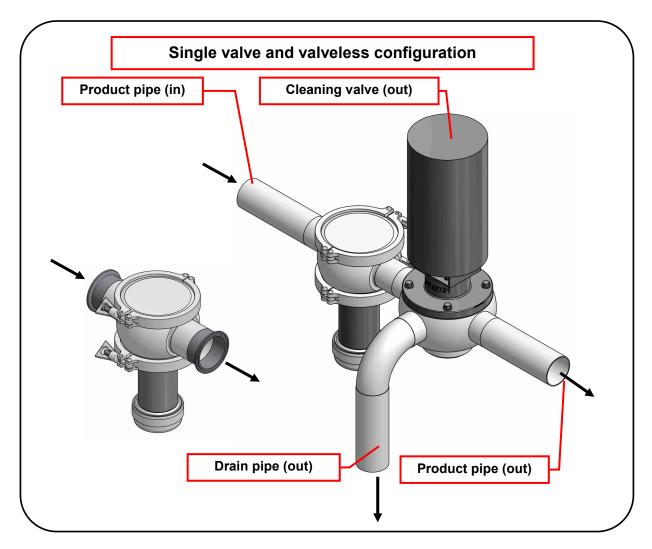
### Removal of ferromagnetic particles in a CIP configuration



# When cleaning the filter of ferromagnetic particles with optional double valve configuration

- Stop normal product flow.
- Activate cleaning valves.
- Start cleaning fluid.
- Pneumatically move magnet in the "out" position.
- Ensure enough time is given for the disposal of ferromagnetic particles; the drain pipe may also be used for sampling.
- Pneumatically move magnet in the "in" position.
- Stop fluid flow through the cleaning pipes.
- Deactivate cleaning valves.
- Resume normal product flow.





# When cleaning the filter of ferromagnetic particles with optional single valve configuration

- Activate Cleaning valve.
- Ensure enough time is given for the disposal of ferromagnetic particles; the drain pipe may also be used for sampling.
- Deactivate cleaning valve.

Normal product flow is resumed.

### When cleaning the filter of ferromagnetic particles without any valves

Dispose of ferromagnetic particles through another outlet in the installation.

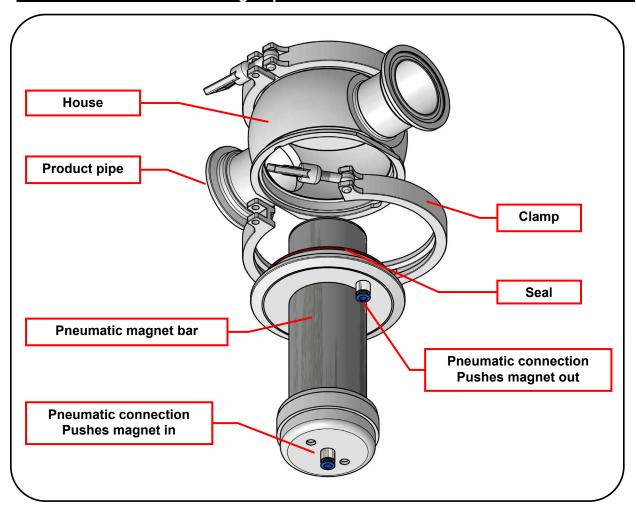
### Please note

This instruction does not cover the CIP procedure for the entire installation.

Always dispose of ferromagnetic particles before the CIP process.



# Construction and functioning of pneumatic bar filter



### **Function**

The function of the device is to capture ferromagnetic particles in the product stream, in combination with a CIP configuration.

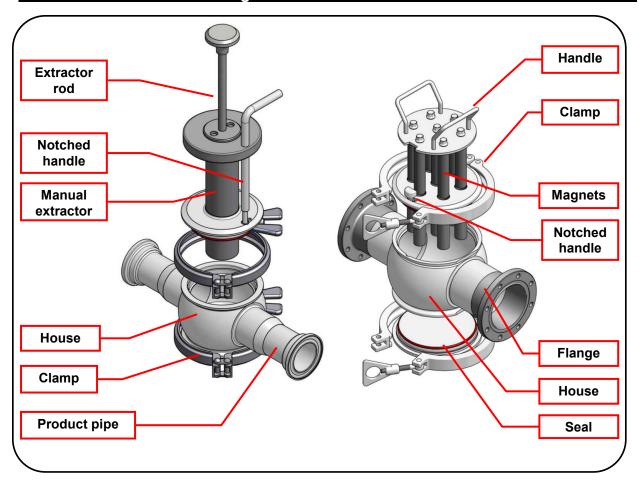
The product flows through the pipe and around the central magnet and the magnet captures ferromagnetic particles.

When disposing of the particles, the central magnet inside the pneumatic bar moves down, allowing the particles to be flushed out.

There are two pneumatic connections on the filter, that push the pneumatic bar in and out.



# Construction and functioning of manual filter



### **Function**

The function of the device is to capture ferromagnetic particles in the product stream.

The product flows through the pipe and around the central magnets, these capture ferromagnetic particles.

When disposing of the particles, the extractor unit must first be removed from the housing. Only then will the notched handles allow the magnets to be removed from the extractor.

### When cleaning the manual filters of ferromagnetic particles

- Stop product flow.
- Loosen clamps and remove extractor with magnets unit, from the housing.
- Loosen the notched handles and remove the magnet unit from the extractor.
- Place the magnet unit away from the extractor.
- Clean the ferromagnetic particles from the extractor with a clean soft cloth or brush.
- Dispose of ferromagnetic debris.
- Replace magnet unit in extractor and refasten.
- Replace extractor and magnet unit in housing and refasten.
- Resume product flow.



### Installation, start-up and servicing

### General installation

Only allow qualified personnel to work on the installation. Connect joints or flanges correctly to the inlet and outlet joint. Handle the filter with great care. The tube is very fragile. Remember that any ferromagnetic tools and components are attracted to the magnet and may damage it.

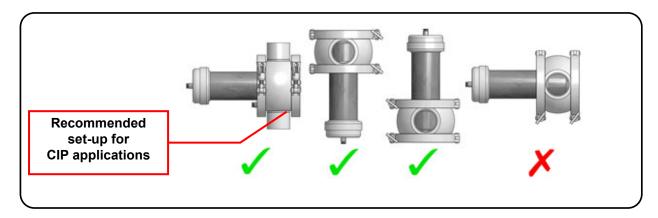
### Installation Pneumatic bar CIP filters

DIN11864-1:2008 Aseptic screwed pipe connection, standard type

DIN11864-2:2008 Aseptic flanged pipe connection, standard type

DIN11864-3:2008 Aseptic clamp pipe connection, standard type

For other options consult EHEDG Position Paper "Pipeline and Process connections"



### General start-up

Ensure that:

- The device has no damages or malfunctions and all connections, whether mechanical or pneumatic, are made properly.
- The filter correctly is installed and at the proper work height. Never install with both the two connection flanges and the magnet bar in a horizontal position.

### Start-up pneumatic bar filters

Test the pneumatic bar operation with a paperclip. It should react if the magnet is operated.

### Servicing

If the magnet bar tube is damaged or dented, check that it still operates correctly.

Spare parts include the pneumatic magnet bar and the seals. The seals must be replaced every year.

Goudsmit Magnetic Systems can offer a yearly inspection with a replacement of seals and magnetic inspection report and certificate.

### Storage and dismantling

When recycling the device at the end of its technical life, dispose of correctly and according to local regulations.